

Remarks

(1) Although a separate display unit provides conveniences when textual information is displayed, the separate display unit will be lightly used in most cases. In particular, the separate display unit is useful for watching foreign programs or for studying foreign languages. However, since the separate display unit may ruin the appearance of the TV monitor or collect dust, it would be desirable that the separate display unit can be built into the television in a retractable manner. None of the references has this feature. Thus, in new Claim 21, this added feature is clearly pointed out. New Claim 22 is further restricted from new Claim 21 in that the retractable separate display unit uses different text colors for different speakers. This retractable separate display unit is clearly described in the original specification (page 8, lines 14-26).

(2) The TV monitor with a separate display unit requires cooperating input signals with a special communication protocol, particularly when the input signals come from a DVD player or a set-top box (cable or satellite TVs). In case of DVD players, the transmission of video and textual data will be easier if the TV monitor two video inputs: one for videos and the other for textual data. New Claim 23 is such a video display apparatus which has two input ports. This feature is clearly described in the original specification (page 14, lines 1-4 and Fig. 23). New Claim 24 is further restricted from new Claim 23 in that the separate display unit uses different text colors for different speakers.

(3) For a DVD player, sometimes it is difficult to combine video signals and textual signals in a separable manner so that the two signals can be separated later while maintaining comparability with existing equipment. Currently, most TV monitors support only one input video signals. If a DVD player combines video signals and textual signals in a separable manner, it may not be compatible with most TV monitors. Thus, it would be desirable if a DVD player outputs two video signals: one for videos and the other for textual data. None of the references has this feature. This feature is clearly described in the original specification (page 14, lines 1-4). In new Claim 25, a DVD player outputs two video signals and a TV receiver displays receives the two video signals and display them accordingly. New Claim 26 is further restricted from new Claim 25 in that the retractable separate display unit uses

1 different text colors for different speakers. New Claim 27 is a DVD player which
2 outputs two video signals: one for videos and the other for textual data. New Claim
3 28 is further restricted from new Claim 27 in that the textual data is subtitle images.
4 New Claim 29 is further restricted from new Claim 27 in that the textual data is
5 closed caption text.

6 (4) In most DVDs, textual information is provided in the form of subtitle images.
7 However, these subtitle images are difficult to manipulate (i.e., resizing, changing
8 fonts, etc). Therefore, a DVD player, which has a capability to convert subtitle
9 images into text codes and to output the text codes, will be useful for a TV monitor
10 which has a separate display unit. New Claim 30 presents a DVD player which has
11 this feature. This kind of DVD player is described in the original specification (page
12 14, lines 13-26). New Claim 31 is a DVD player which converts subtitle images into
13 text codes and mixes video signals and the text codes in a separable manner for a TV
14 receiver which has a separate display unit. None of the references has this feature.
15 New Claim 32 is further restricted from new Claim 31 in that video signals and text
16 codes are mixed using the closed caption text technology.

17 (5) Claim 16 was rejected under U.S.C. 102(b) as being anticipated by Seder (5570944).
18 In Seder, the separate display unit was intended for selected viewers (please see
19 Abstract and Fig. 1). In particular, the invention of Seder relates to a system for
20 selectively delivering textual information (Col. 1, lines 5-6). The system is intended
21 for selected persons who have hearing problems. In order to avoid distraction of
22 normal-hearing population, the separate display unit is placed in the back of the
23 theater and a user uses a reflector to see the textual information. On the other hand,
24 the Applicant's invention is intended for the whole audience and the separate display
25 unit is located on the outer perimeter of said video display unit. In new Claim 33, this
26 difference is clearly pointed out (the separate display unit is located on the outer
27 perimeter of the screen). New Claim 34 is a further restricted version of new Claim
28 33 in that the separate display unit is retractable.